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Programs in Graduate Medical Education
Florida, Department of Education.
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THE GEOGRAPHIC AND SPECIALTY DISTRIBUTION OF PHYSICIANS IN FLORIDA

PART II: RESOURCES AND DEMAND

DECEMBER 1978

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This is the second of a two-part series of studies designed to point up the physician needs of Florida. The study was initiated by the Community Hospital Education Council to provide guidance in seeking the most efficacious commitment of the state's resources to graduate medical education.

There have been many attempts at assessment of the "right" number of doctors to meet the care requirements of a given population. This one is a little different. The ratios recommended in this study are essentially based on the professional judgment of a carefully selected panel of consultants who provided invaluable guidance throughout, based on their widespread medical practice experiince. The inventories, calculations and other data presented herein are, however, solely the responsibility of the study directors.

The result, we are confident, represents the current status of physician manpower in Florida more accurately than any previous study.

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Study Directors

December 12, 1978

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SUMMARY

The number of active physicians in Florida in mid-1978 was 15,744. When allowance is made for non-clinical activities, it is estimated these equate to 13,685 full-time-equivalent patient care providers, representing all of the specialties of the profession.

The number of people seeking physician services in Florida exceeds the census estimate due both to a large number of short-term visitors and to many "seasonal residents". Our estimate is that these will add 10 percent to the apparent census, giving a total of 9.8 million.

Using the above two adjusted figures, and recognizing certain unique characteristics such as the age of the population and the geography of the state, an effort has been made to derive optimal ratios of physicians, by specialty, to population. These ratios have been carefully evaluated by a panel of experienced consultants and adjusted in accordance with their informed judgment.

Such ratios would be expected to have greater meaning on a statewide basis than in application to any limited geographic division. As such, valuable insight is provided for the conduct of education and training programs. But it is obvious that there is serious maldistribution within the state, the most critical unmet demand being for primary care practitioners in rural areas.

The principal medical manpower shortfall in Florida in 1978 is

General and Family Physicians Emergency Physicians . . . . General Internists	Short 621
Pediatricians	Short 278
Obstetricians	Short 245

There is likewise a shortage of psychiatrists (-201) and to a lesser extent, physiatrists (-59), dermatologists (-56) and neurologist (-33). All of the other specialties appear to be adequate or nearly so in numbers.

Sub-area studies of portions of the state showing extremes of physician/population ratios are underway in order to evaluate these theoretical computations.

INTRODUCTION

Florida's population grew by more than three-quarters in the decade ending in 1960 and added another third by 1970. Then the rate of population growth slowed. It is now accelerating again and the census population is estimated to be 8.9 million in mid-1978 and is projected to be just under 12 million by 1990.

Combined with expanded knowledge to provide increased quality and quantity of medical care, this growth has created a significantly greater need for health services, including services of physicians.

The attractions of good living and professional practice opportunities, aided by major licensure requirement changes, have caused the physician population to expand even faster than the growth among the general public. There were about 8,000 licensed physicians in the state in 1970, about 11,000 in 1973 and there are about 17,000 in 1978. In addition, there are more than 13,000 physicians (M.D. and D.O.) representing all of the specialties now holding a valid Florida license but residing elsewhere. These totals are not adjusted downward for those in administrative medicine, in academic programs or otherwise in non-clinical activities. (See Part I of this study.)

The growth in physician population in Florida has come from expanded educational programs and from a continuing immigration of physicians from other states.

The Community Hospital Education Council's program of substantial financial support from the state to graduate medical education in the primary care specialties in Florida's hospitals has stimulated the number of training programs in the primary care specialties and has increased the number of physicians who have undergone training in these internships and residencies. In June 1978, 235 physicians completed training in 37 programs. In addition, there are 25± physicians who complete primary care training each year at Shands Teaching Hospital of the University of Florida. In 1977-78 the CHEC grants and aids to community hospital programs totaled $3,048,000. One of the most significant developments to which the CHEC program has contributed has been the expansion and development of nine family practice programs in Florida, other than the three in the military services.

It is apparent that the net increase in physicians has exceeded 1000 per year in recent years, a figure considerably in excess of those trained in Florida-based programs. Immigration from elsewhere has contributed substantially to this number and continues to do so.

On the other hand, there seems to be an acceleration in the rate of retirement of physicians from active clinical practice and a decrease in the age at which they cease to practice or practice less than full time. This trend accentuates the need for a large pool of physicians to replace those who terminate clinical practice.

PRELIMINARY INVESTIGATIONS

As planned when the project was begun, the consultant conducted two fairly extensive series of interviews. One series was outside Florida, to gather the latest national data on supply, demand and need with respect to physician services, to review the techniques being used in studies similar to this one and to learn the degree of success and credibility which other studies have achieved. One group of interviews in the first series was held with staff of the Bureau of Health Manpower (BHM) and other sections of the Health Resources Administration, DHEW. Several of these interviews were extended by person or by phone during the study. The federal officials appear to be comfortable with physician/population ratios and have compiled a volume of selected papers on them as well as a variety of other relevant publications. There is difference of opinion about the relative merit of physician/population ratios based on professional judgment, medical needs and demand/productivity. The Graduate Medical Education National Advisory Committee (GMENAC), which is staffed by BHM personnel, is now constructing models which attempt to factor in the characteristics of ideal medical care and future social and systemic changes which will influence demand or productivity. In BHM there was interest and support of Florida's decision to pursue the professional judgment ratio approach.

There were discussions with others in or related to government, in Washington and in the regional office in Atlanta, including respected medical educators and health manpower planners. There was general agreement by all of these persons that, considering the improved but still uncertain state of the art and Florida's dynamic growth problems, we should proceed with a study of "perceived need" in the opinion of competent professionals.

The consultant met with several staff of the American Medical Association, most of whom were familiar with the previous Florida studies done in 1973 and 1976. It has been the position of the AMA to question physician/population ratios per se, and it has strongly opposed DHEW's intent to declare, on the basis of low physician/population ratios, certain areas of the country to have a shortage of physicians. They urged consideration, if any physician/population ratios were to be developed for a small area, that all of the special characteristics of that area be considered. The AMA supplied valuable data and reports.

A second series of conferences was held in Florida. At the government level, for the purpose of gathering the latest data and information about any related study, meetings were held with staff of the State Boards of Medical Examiners (M.D. and D.O.), the Office of Comprehensive Health Planning, the Governor's staff, and the staff of the relevant Legislative committees. There were meetings with the staffs of several health systems agencies. It was agreed, particularly, to keep informed those concerned with manpower in the office of Comprehensive Health Planning.

The administration and selected faculty members of the three medical schools were visited to inform them of the study and to seek their advice. Included in the interviews were those who had participated in past health manpower studies in Florida. These interviews included discussions with staff of the Division of Population Studies at the University of Florida about population projections. There were meetings with faculty in the Department of Epidemiology and Public Health of the University of Miami School of Medicine and staff of the Southern Health Foundation about the study of the needs of visitors for physician services which was performed in 1975 and 1976.

Discussions were held with the staff of the Florida Medical Association in Jacksonville, Tallahassee and Miami. These were for the purpose of informing FMA staff about the study and securing their advice and data.

In addition, there was a special meeting with Dr. William E. Meyer, Chairman of the FMA Subcommittee on Physician/Population Ratios. Dr. Meyer's subcommittee likewise is interested in developing ratios and it was agreed to seek joint benefit from the parallel studies.

The substance of these preliminary interviews, both national and statewide, generally supported the study and aided in its design. Memoranda of record of these interviews are in the study file.

PANEL OF CONSULTANTS

A Panel of Consultants for the study was appointed by Charles J. Kahn, M.D., Chairman of the Council, to carry out the functions enumerated in the outline:

(A) To review and modify the methodology of the project and otherwise guide the principal investigators in the conduct of the project.

(B) To establish the baseline criteria of demand, as perceived by the members of the Panel of Consultants, for each major clinical specialty.

(C) To review the inventory of active physicians and the criteria of demand for the state and selected subregions and to report the findings of their review to the CHEC.

The Panel, 14 in number, was selected primarily to be representative of physicians in the state, both by specialty and by geography. Nonphysician members represented other health professions, government and health planning. The Panel met three times--first in three sectional groups and twice as a whole--to develop, give advice and confirm the inventories, ratios and The Panhandle Sub-Area Study.

At their initial meetings, the Panel received publications and abstracts containing data and policy about physician supply and demand, the setting of ratios and the findings of other studies in the country from 1900 to those currently in progress. They also received population reports by race, by age and by county and reports on seasonal residents and short-term visitors. The Panel particularly sought and received national data on the relative demand for physician services related to age of population. Unfortunately, by the end of the study there was still no significant Medicare data for Florida except for a very little on impatient admissions.

Attendance at the Panel meetings was good. In most instances when a Panel member missed a meeting, one of the study directors was able to consult with him or her individually to enable the member to share in the current stage of planning and decision making.

The Panel approved the methodology of the study, at the start and during its implementation. They made decisions on the manner in which the inventory of physicians was refined in terms of clinical effort. Most importantly, they set and adjusted the ratios of demand for the state in each specialty. They approved increasing the census figures substantially to account for seasonal residents and visitors.

PHYSICIAN INVENTORY

Part I of this study, "Physician Census Data", was completed in June 1978. It is an extensive and meticulous tabulation of the licensed (and for federal and state employees not necessarily licensed in Florida) active physicians in the state, tabulated by county and by specialty. Those declaring themselves retired or inactive were not counted. The physicians are listed as private practice, medical school faculty, interns/residents, federal (military and VA) and state. 15,013 doctors of medicine and 731 doctors of osteopathy were combined in this inventory for a total active physician population of 15,744.

This total does include some licensed physicians who are in other activities or who spend less than full time in clinical practice. Therefore, this basic inventory was revised downward in this part of the study to develop full-time equivalent tallies of physicians in patient care.

The first step in this process was to eliminate any who were not in clinical practice in 1978 or who were substantially occupied by other responsibilities. These eliminations are displayed in Table I.

Three specialties, totaling 158 physicians, were deemed to be providing minimal or no clinical care of patients and were removed from the practitioner inventory, as were 63 physicians whose specialties could not be determined.

By decision of the Panel of Consultants, the full-time faculty of Florida's three medical schools, and the staffs of the three Veterans Administration hospitals affiliated with those medical schools, a total of 811 physicians, would be considered to contribute one-quarter of their

Table I

REDUCTION OF PHYSICIAN CENSUS ON THE BASIS OF PATIENT CARE ACTIVITY

Total Physician Inventory, June 1978		15,744
Less:		
Aerospace Medicine	27	
Legal Medicine	4	
Public Health	127	
Unknown specialties	63	
	221	
Three-fourths of Medical Faculty equivalents (non-patient care time)	608	
Two-thirds of House-staff equivalents (non-patient care time)	1230	
	2059	2,059
Full-Time-Equivalent Clinical Practitioners		13,685

time to direct patient care. Consequently, the equivalent of 608 physicians, spread among the variety of specialties, were removed from the inventory.

It was further concluded by the Panel that the average intern and resident in training spends one-third of his time being directly responsible for the clinical care of patients. Consequently, two-thirds of the inventory of house officers was removed from the count of clinically active practitioners.

These total deductions amount to 2,059 and reduced the physician inventory in Part I to 13,685 active practitioners.

The basic adjusted inventory of physicians active in clinical practice on a full-time equivalent basis, by specialty, is contained in Table II. The total of 13,685 represents 140 active physicians per 100,00 population, based on the total adjusted population used in this study.

It is difficult to compare the numbers of physicians who were actively practicing in the clinical specialties in prior years as was done with total licensees on Page 4. In the primary care categories and many of the other major specialties, there were enough differences in inventory technique to preclude hard number comparison. Nevertheless, it is accurrate to say that every specialty has grown significantly, and most at a rate faster than the growth of the population over the last five years.

Certain other important decisions relative to the inventory were made by the Panel:

(1) It was agreed to define primary care physicians as those in general and family practice (including emergency medicine), general internal medicine, pediatrics and obstetrics/gynecology, except for those in Ob/Gyn who restrict their practice to gynecology.

(2) It was recognized that some primary care is practiced by subspecialists in internal medicine and that some subspecialties are practiced by general internists. It was further recognized that some primary care is practiced by general surgeons and that some surgery is practiced by general and family practitioners.

The decision was made that these might well be offsetting efforts and that it was not practical to subdivide the practice of these individuals for inventory purposes.

Despite the necessity to make these classification decisions, the Panel and the study staff clearly recognize that primary care is practiced by physicians other than those described in this study as "primary care" physicians.

Table II

PHYSICIANS IN ACTIVE CLINICAL PRACTICE (FTE)
By Specialty in Florida - June, 1978

Specialty	Number	Specialty	Number
General & Family Practice	3384	Anesthesiology	581
(Emergency Medicine - included in GP/FP)	(524)	Pathology	367
General Internal Medicine	1581	Radiology	645
Pediatrics	702	Gynecology	144
Obstetrics/Gynecology	735		
		Allergy	83
Dermatology	238	Cardiovascular Disease	374
Neurology	163	Endocrinology	48
Physical Medicine	39	Gastroenterology	114
Psychiatry	779	Geriatric Medicine	29
		Hematology/Oncology	70
General Surgery	989	Infectious Disease	20
Colon & Rectal Surgery	47	Neoplastic Disease	18
Neurosurgery	128	Nephrology	50
Ophthalmology	527	Pulmonary Disease	81
Orthopedic Surgery	573	Rheumatology	45
Otolaryngology	313		
Plastic Surgery	152	General Preventive Medicine	16
Thoracic Surgery	178	Occupational Medicine	33
Urology	379	Nuclear Medicine	14

* Total Active Practitioners - 13,685
Per 100,000 Population - 140

* Does not add exactly because of rounding fractional effort.

In the inventory in Table II, pediatric specialists have been included with counterpart specialists in neurology, psychiatry, general surgery, allergy, and cardiovascular disease.

POPULATION ESTIMATES

A special effort was made to estimate the impact on the demand for physician services in Florida generated by those who own or rent second homes in the state and who have been classified in this study as "seasonal residents". It was also desired to estimate accurately the demand by those who vacation in Florida for a few weeks and those who come to the state for a few days or more for business, conventions and other meetings, and which have been classified in this study as "short-term visitors". These relatively large numbers are not included in official census figures for Florida.

There are so many persons in each of these categories in Florida each year that they make a significant impact on the demand for many services, including health care. A realistic estimate of it is essential to the accuracy of any study of the need or demand for services to "population", as this study seeks to do. The principal investigators and the Panel of Consultants have pursued this matter extensively with other individual and institutional researchers and have developed the aggregate population estimate shown on Table III. This table indicates that the equivalent population generating a demand for physician services in Florida in 1978 is 9.8 million persons. This is 900,000 more than the medium census estimate for mid-1978 as developed by the Division of Population Studies at the University of Florida. These census estimates are widely used in many kinds of planning in the state.

The Division's census estimate is intended to include those persons who reside in Florida more than six months, even though they may have a legal or voting residence outside the state.

SEASONAL RESIDENTS

The Florida counties, as well as the state, try to estimate their populations which are not in the census but which create demand for utilities and other services. In 1973 the Metropolitan Dade County Planning Department published a "Technical Supplement to the Water Quality Management Plan" in which it made three projections of the "non-resident" population for 1975. A "non-resident" is one who is not a short-term visitor of any kind and who resides in the county, but generally less than six months, and is the class of population which this study calls "seasonal resident". The maximum estimate for this population in Dade County in 1975 was 298,000; the medium estimate was 179,000; and the minimum estimate was 116,000. For this study the medium estimate of 179,000, which was approximately 12 percent of the Dade County census in that year, was chosen as the basis for estimating the seasonal resident population in the state.

Ten south Florida counties, including Dade, were assumed to have seasonal residents, who were not in the census, of approximately the same relative magnitude as Dade. Twelve percent of the census of these ten counties in 1978 equals 584,000 persons. That these have a significant impact on the demand for physician services is widely recognized by doctors. Further, it is the experience of some members of the Panel that seasonal residents frequently opt to secure much of their health care in Florida, although they live elsewhere about half the year.

There are seasonal residents in other Florida counties, but probably in lesser proportion than 12 percent of the census. On the other hand, a number of seasonal residents may have been picked up in the census estimate through various census-taking techniques. And full allowance must be made for medical care received at their residences in another state. In recognition of these factors, and to be conservative, the estimate of 584,000 seasonal residents was reduced by half. Consequently, a seasonal resident population of 292,000 has been added to the population estimate, as indicated in Table III.

SHORT-TERM VISITORS

A study of visitors' needs for physician services, carried out by the Department of Epidemiology of the University of Miami School of Medicine and reported by the Southern Health Foundation in 1977, stated that tourists, vacationers, businessmen and other visitors accounted for 8.3 percent of emergency room visits and 5.6 percent of physician office visits in 1975. In the report of this study, they estimate that 1,344,000 physician office visits and 200,000 emergency room visits were generated in 1975 by the approximately 27 million persons who visited the state, according to the Florida Department of Commerce.

The number of Florida visitors reported by the Department of Commerce in 1977, the latest year for which data are available, was 30,500,000. Based on the experience described in the Southern Health Foundation's report, a like number of visitors in 1978 would generate approximately 1,700,000 ambulatory visits to physicians in their offices or in emergency departments. According to the National Ambulatory Medical Care Survey, conducted by DHEW in 1975, the average individual in the United States visited a physician 2.7 times per year. On the basis of this encounter rate, the 1,700,000 visits generate a demand on physician services which is equivalent to a 630,000 population. This number has been added to the population estimate in Table III.

These calculated additions to the census population were thoroughly reviewed by the Panel, many of whom felt that their experience supported

Table III

POPULATION ESTIMATE

State of Florida - 1978

Census Estimate	
Division of Population Studies University of Florida	8,908,000
Seasonal Residents	
Legally resident elsewhere but living in Florida part of each year - estimated for 10 South Florida counties 584,000, less 50% for those who receive part of medical care outside Florida and for some who are in the Florida census	292,000
Visitors	
Short-term, per Department of Commerce - 30,550,000 Will generate 1,700,000 ambulatory visits (based on Southern Health Foundation study) 2.7 visits per capita	630,000
Total Population Demanding Services .	9,830,000

the number of encounters by seasonal residents and visitors which were being used as the basis of these estimates. While there was some feeling that the increase in each of these categories might be slightly high or low, there was a definite consensus that it was entirely realistic to add ten percent to the official census to reflect the demand of these people.

FLORIDA'S UNUSUAL DEMANDS ON PHYSICIAN SERVICES

Special attention in this study was paid to those characteristics of Florida which make an unusual demand on physician services. The major ones are the high percentage of aged which is 16.7 percent as compared with less than 11 percent in the country as a whole; its large population growth, not only in permanent residents but also as a second home, a tourist attraction and a gateway to Latin America; and its geography with its long coastline, great distances and high volume of automobile traffic.

The high incidence of those persons 65 and over has a much greater impact on the demand for physician services than any other factor, with particular bearing on the demand for certain specialties, as well as for primary care physicians.

Unfortunately, there is not yet available a significant amount of Medicare data for Florida, except for the first report on in-patient hospitalization. Those concerned with this study relied primarily on the data from the National Ambulatory Medical Care Survey which was conducted by DHEW in 1975. Certain data from this survey are displayed in Table IV.

The average number of visits per person per year in 1975 for the total population was 2.7, but it was 4.3 for those 65 and over, and 2.6 for those under 65.

Persons 65 and over accounted for 16.4 percent of all visits, while those under 65 accounted for 83.6 percent. The 65+ population accounted for 19.4 percent of all office visits in non-metro areas.

The elderly tend to place disproportinate demands on certain specialty groups (i.e., internal medicine, eye, urology and cardiology) while significantly reducing the need for others (i.e., Ob/Gyn, orthopedic surgery). These comparisons are shown in Table IV.

FLORIDA BASELINE PHYSICIAN RATIOS - 1978

New physician/population ratios developed in this study are called The Florida Baseline Physician Ratios - 1978 (FBPR-78) to distinguish them from similar ratios developed in the 1973 and 1976 studies. These are displayed in Table V. They are the product of a thorough study by the Panel and the study staff of inventories and ratios developed nationally and in

Table IV

VISITS TO PHYSICIANS OFFICES - 1975*

In the United States

Category	Total Population	65 & over	Under 65
Average visits per person per year	2.7	4.3	2.6
Percent of all visits	100.0	16.4[1]	83.6
Percent of office care provided by			
FP	41.3	45.5	40.5
IM	10.9	19.3	9.3
Ob/Gyn	8.5	1.2	9.9
G.S.	7.3	7.9	7.2
Eye	4.4	6.9	3.8
ORS	3.4	1.9	3.7
Derm	2.5	2.3	2.5
Urol	1.9	3.4	1.6
CVD	1.3	3.4	0.9
All others . .	18.5	8.2	20.6
	100.0	100.0	100.0

Percent of visits to selected specialties by patients 65 and over:

FP	18.0	Eye	26.1	Derm	15.4
IM	28.9	ORS	9.1	Urol	29.3
Ob/Gyn ..	2.4	ENT	13.6	CVD	42.1
GS	17.8	Psych ...	2.8		

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* National Ambulatory Medical Care Survey, DHEW 1975

[1] 19.4% in non-metro areas

Table V

FLORIDA BASELINE PHYSICIAN RATIOS - 1978

Recommended Physician/Population Ratios Based on Demand for the State of Florida - 1978

Specialty	Ratio per 100,000 Pop.
General Practice & Family Practice	40
(Including those in Emergency Medicine)	(5)
General Internal Medicine	17
Sub-total	(57)
Pediatrics	10
Sub-total	(67)
Ob/Gyn	10
Total Primary Care	77
Dermatology	3.0
Neurology	2.0
Physical Medicine	1.0
Psychiatry	10.0
General Surgery	10.0
Colon & Rectal Surgery	0.5
Neurosurgery	1.5
Ophthalmology	5.0
Orthopedic Surgery	6.0
Otolaryngology	3.0
Plastic Surgery	1.0
Thoracic Surgery	1.5
Urology	4.0

other states. They also reflect conditions which influence the education and practice decisions of new physicians and factors which bear on the distribution of physicians. The attached bibliography calls attention to the vast array of statistical information on the geographic and specialty distribution of physicians which is available for analysis and comparison. Most of it has been developed since 1973.

FBPR-78 include ratios for all of the major specialties recognized by The American Board of Medical Specialties, with three exceptions. The new ratios are those which, in the professional judgment of the Panel of Consultants, represent the demand for various physician specialists by the population of Florida in 1978, with scrupulous regard for the special characteristics of Florida and its people that influence that demand.

For the purposes of this study, it was decided not to develop ratios for anesthesiologists, pathologists and radiologists because these specialists are primarily hospital-based and their numbers are conditioned largely by the contractual arrangements between the specialists and the institutions. However, their inventories are reported.

It was also decided not to set ratios for the subspecialties of internal medicine or for certain lightly populated specialties like occupational medicine and nuclear medicine. However, the inventories of the medical subspecialists are reported for information since there are over 900 active practitioners in the medical subspecialty group.

Although no standards of demand have been established for the specialties in the preceding two paragraphs, a comparison of the ratios of several, in Florida and the U.S., is attached as Appendix A.

FBPR-78 VERSUS PREVIOUS FLORIDA RATIOS

The 1978 baseline ratios differ somewhat from those which were developed in prior studies (1973 and 1976) and which were essentially the same.

The FBPR-78 for primary care estimates the current demand in Florida to be for 77 physicians per 100,000. This is less than the total of 90 suggested in previous Florida studies and in studies in some other states and by GMENAC, which proposed 93 on a theoretical case-load basis.

Seventy-seven may seem to be too low but there are significant differences in what is included. For instance, in this ratio we are eliminating all of the subspecialties of medicine and pediatrics, as well as those who classify themselves as gynecologists. These groups are often included in primary care in other studies, including our 1973 and 1976 reports.

The breakdown in primary care ratio is for 40 physicians in the general practice and family practice group, including five in emergency medicine. The estimated ratio for general internal medicine (subspecialties excluded) was set at 17, for a total of 57 in these fundamental primary care areas. The ratio of 10/100,000 for both pediatrics and Ob/Gyn is a rather commonly accepted indication of demand in these specialties.

Colon and rectal surgery is a specialty for which ratios have not generally been set in other areas, but 0.5 is above the national inventory for these specialists. There are more plastic surgeons than 1 per 100,000 people in the country, but the most common ratio set elsewhere is also 1.0. The most frequent ratio elsewhere for thoracic surgery is 1.0, compared with the 1.5 proposed for Florida. However, GMENAC recommends 2.8.

Comparisons among ratios can be insidious. The latest ones are obviously the better product of changing times, changing circumstances, and an improved state of the art. It is impossible to make anything more than a general comparison among them, as it often is among inventories, medical care delivery systems, and practice patterns. We believe they are the best guides of statewide demand in Florida which have been developed so far.

FLORIDA'S SHORTAGES IN TERMS OF DEMAND

In Table VI are displayed the 1978 full-time-practice-equivalent physicians in the primary care specialties and in 13 other major disciplines. Also shown is the actual ratio per 100,000 adjusted population in 1978, compared with the ratios of demand developed in this study. Finally, in the right-hand column are the numbers of physicians computed to be "short" or "in excess" in 1978.

Most significant is the shortage of 536 general and family practitioners, and an additional shortage of 85 general internists. These combine to a requirement in excess of current supply of 621 physicians. The addition of an estimated shortage of 278 pediatricians and 245 obstetrician/gynecologists makes the total shortage in primary care for Florida to be 1,144 physicians. The apparent shortage in Ob/Gyn may be somewhat magnified by the elimination of those who limit to gynecology in this inventory.

The next largest apparent shortages numerically are in psychiatry, where the FBPR-78 calls for 201 more physicians: in dermatology (-56) and in neurology (-33).

As can be seen in Table VI, the other specialties are about even with demand, or have an inventory in excess of the number suggested by the ratios.

In many parts of the state, it is the opinion of the Panel, there is interchangeability between family practitioners and general internists. It is important to stress the need to overcome the combined shortage of 621 in these two specialties, by far the largest gap in physician services in 1978. Successful recruiting of either or both groups is the essential key to solving problems of basic access to care in some areas of Florida.

Table VI

FULL-TIME-PRACTICE-EQUIVALENT PHYSICIANS IN FLORIDA IN 1978
Compared with the Number Required by Florida Baseline Physician Ratios-1978 For an Adjusted Population of 9.8 Million

Specialty	#Active 1978	Ratio per 100,000 pop	Demand per FBPR-78	Shortage or Excess 1978
General Practice Family Practice	3384	35	40	- 536
(Emergency Medicine incl. in GP/FP)	(524)	(5)	(5)	(+ 34)
Gen Internal Med	1581	16	17	- 85
(Sub-total)	(4965)	(51)	(57)	(- 621)
Pediatrics	702	7	10	- 278
(Sub-total)	(5667)	(58)	(67)	(- 899)
Ob/Gyn	735	8	10	- 245
Total	6402	66	77	-1144
Dermatology	238	2.4	3.0	- 56
Neurology	163	1.7	2.0	- 33
Physical Medicine	39	0.4	1.0	- 59
Psychiatry	779	7.9	10.0	- 201
General Surgery	989	10.1	10.0	+ 9
Colon & Rectal Surgery	47	0.5	0.5	- 2
Neurosurgery	128	1.3	1.5	- 19
Ophthalmology	527	5.4	5.0	+ 37
Orthopedic Surgery	573	5.8	6.0	- 15
Otolaryngology	313	3.2	3.0	+ 19
Plastic Surgery	152	1.6	1.0	+ 54
Thoracic Surgery	178	1.8	1.5	+ 31
Urology	379	3.9	4.0	- 13

It should be noted that 1,144 is the smallest gap in primary care physicians that has been identified in any of the Florida studies to date. This is true even though the current study has increased the population base substantially to make allowance for seasonal residents and short-term visitors.

The shortage in psychiatrists is the biggest one outside of primary care in spite of a numerical gain in practitioners in recent years. Furthermore, pending changes in the State of Florida care of mental health patients may compound this apparent shortage in the next few years.

The shortages in dermatologists and physiatrists are about the same. but the numbers of these practitioners differ greatly. There has been a gain of 91 dermatologists in five years, even though the demand for them was estimated to be fulfilled in 1973. The current shortage of 56 is predicated on the FBPR-78 ratio of 3.0, which reflects the Panel's conviction that Florida's population and climate require a larger number of these specialists.

The inventory of active physiatrists grew from 29 to 39 in the five years between studies. It is still 59 short, according to FBPR-78. One of the problems in overcoming this shortage is the small number of graduates nationally with specialty training in this field.

The number of neurologists, on roughly comparable inventory bases, has doubled in five years. The gap of 33 represents the desire for an additional 16 percent increase in the number of these specialists in our large secondary and tertiary care areas.

SUB-AREA STUDIES

Two sub-areas of Florida were chosen for special study, since it was desired to test the ratios in a section of the state which seemed to be underserved and in an area which seemed to be well provided with physicians. It was expected that this would help to determine how the ratios should be modified for a rural area that could not support the full spectrum of specialist services and to what degree a large urban area might exceed the ratios.

The seemingly underserved area selected was a group of six counties in the central Panhandle. The doctors in this area have been organized into the Panhandle Medical Society and, in addition to the apparently low physician ratio, this medical organization factor was the reason for selecting the area. The well provided area selected for study was Dade County.

A full report will be issued later on these studies and only a brief summary will be provided here.

FINDINGS OF THE PANHANDLE STUDY

The six counties lie between the coastal counties west of the Apalachicola River and the Alabama border, roughly 100 by 50 miles, with a population of 119,000. The average family income in this essentially rural area is comparatively small.

This is not a self-contained medical service area, and much of the medical care, including physician services, is acquired in Tallahassee, Panama City, Pensacola and Dothan, Alabama--all outside the area. There are five hospitals with generally low occupancy rates and significant percentages of the population of each county go outside the six-county area to be hospitalized. Because so much of the population travels outside for medical care, because income is so low and because distances and problems of transportation are difficult for much of the population, the demand for physicians is considerably less than in more populated areas and in Florida as a whole. Except for a relevance in primary care, the physician/population ratios developed in this study cannot be applied to this six-county area and its medical services system.

The 37 primary care physicians in the area carry patient loads which are significantly above the national average. They generally need and seek the assistance of more physicians. The 12 physicians in specialties other than primary care are not enough to meet the needs of the area as determined by questionnaire responses and interviews with the physicians. Some of the non-primary care specialties are under-represented, and some are not represented at all.

One recommendation of this sub-area study is to add nine physicians in primary care, including a second obstetrician. Another recommendation is to add five other specialists, including the area's first orthopedic surgeon, first ophthalmologist and first urologist.

This would raise the physician population in the six-county Panhandle area from 49 to 63 physicians, 45 of them providing primary care.

Although this area is not a self-sufficient primary and secondary care section of the state, it is typical of many other rural areas. They, too, have a shortage of primary care physicians and the total absence of some needed specialties. Some other underserved areas are identified in terms of existing ratios elsewhere in this report.

The Panhandle study also accentuates the difficulty in recruiting physicians for such an area, and lists among the major problems in recruiting: lower comparative fees for the same services than paid to urban and suburban physicians; lack of satisfactory continuing education opportunities locally, combined with remoteness from secondary and tertiary medical care resources in general; an less than attractive living conditions for the family.

DADE COUNTY SUB-AREA STUDY

An area of the state with the highest ratio of physicians is Dade County, and a simple match of inventory and estimated demand is attached as Appendix B. The report of the Dade County study is not yet available because of a delay in the distribution of questionnaires.

The polls of the doctors of medicine and the doctors of osteopathy were intended to go forward at the same time, about September 1st. However, the decision of the Dade County Medical Association (DCMA) to endorse the study, as well as to assist with the distribution of the questionnaires, was deferred until a meeting on October 30, at which time DCMA agreed to help distribute the questionnaires but declined to be indentified with the study. The questionnaires will be distributed, returned and analyzed shortly, and the report will be submitted as an addendum to this basic report.

Meanwhile, questionnaires were sent to a carefully selected sample of half of the 127 osteopaths in Dade County, and replies were received from 25 active practitioners, of which 21 were in general practice. Responses will be combined with the findings of the M.D. questionnaires. However, they did report that 26 percent of their office patients were seasonal visitors, and 14, over half, of the respondents felt that there were too many physicians in Dade County.

PRIORITY NEEDS IN RURAL AREAS

The rural areas of the state have the most critical unmet deficit of physicians even though the shortages in the urban areas may be numerically greater.

There are 28 rural counties with a 1978 census of less than 30,000 people each. Twenty-one of them are in North Florida, including six on the Big Bend coast, and five are in the south central part of the peninsula on or near Lake Okeechobee. A high percentage of these counties are considered by The Rural Program Office of the Florida Department of HRS and The Committee on Rural Health of the FMA to be significantly in need of more doctors.

The 28 counties have 125 primary care physicians in community practice for a census population of 372,000. This is a shortage of 161 primary care doctors in terms of the ratios developed in this study. This is 14 percent of the primary care shortage for all of Florida although the 28 counties have only 4 percent of the state's population.

One of the larger counties, Hillsborough, has an estimated primary care shortage of 151 and Duval has a shortage of 75, but Hillsborough has a ratio of one primary care physician to every 1801 persons and Duval has one for every 1539 persons while the 28 rural counties have one for every 2974 persons. Hence the shortfall is appreciably higher in the rural areas.

The specialties other than primary care are unusually thin in the rural areas. In all 28 counties there are in community practice only 18 general surgeons, three psychiatrists, one orthopedist, one ophthalmologist and one urologist. These are the specialties, in addition to those in primary care, which should have the highest ratios to population.

It can be said that the rural counties have access to adjacent counties which have more medical resources. This is true for some or parts of some of these counties. But distances to physicians' offices in other counties are usually substantial. The rural North Florida counties, furthermore, are almost a solid underserved block between Duval and Okaloosa except for two or three "islands". Also, there are some counties with larger populations which have underserved rural areas. Collier County has the primary care physicians called for by FBPR-78 but medical care is one thing in Naples and another in Immokalee.

Generally speaking, the rural areas of Florida have not experienced the proportionate gains in physicians which have occurred in the rest of the state in the last five years. Consequently, filling the unmet demand for physicians in rural Florida continues to be an issue of concern.

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PHYSICIANS ACTIVE IN CLINICAL PRACTICE

Per 100,000 Population

Specialty	Florida - 1978	U.S. - 1975
Anesthesiology	6.5	5.2
Pathology	4.1	3.8
Radiology	7.2	6.4
Allergy	0.9	0.9
Cardiovascular Disease	4.2	3.0
Gastroenterology	1.3	0.9
Pulmonary Disease	0.9	0.9

NOTES: -Populations are unadjusted
Florida (1978) = 8,908,000
U.S. (1975) = 213,100,000

-Physician Inventories
Florida, as of June, 1978
U.S., as of Dec. 31, 1975

ACTIVE PHYSICIANS COMPARED WITH ESTIMATED DEMAND

Based on FBPR - 1978

Area: Dade County 1978 Population*:1,769,000

FBPR	Specialty	Active 1978	Req by FBPR	Shortage or Excess
40	General/Family Practice	919	708	+211
(5)	(Emergency Med, incl. in GP/FP)	(84)	(88)	(- 4)
17	General Internal Medicine	413	301	+112
(57)	Sub-Total	(1332)	(1009)	(+323)
10	Pediatrics	173	177	- 4
10	Ob/Gyn	167	177	- 10
77	Total Primary Care	672	362	+309
3.0	Dermatology	76	53	+ 23
2.0	Neurology	49	35	+ 14
1.0	Physical Medicine	13	18	- 5
10.0	Psychiatry	223	177	+ 46
10.0	General Surgery	240	177	+ 63
0.5	Colon & Rectal Surgery	20	9	+ 11
1.5	Neurosurgery	37	27	+ 10
5.0	Ophthalmology	133	88	+ 45
6.0	Orthopedic Surgery	126	106	+ 20
3.0	Otolaryngology	64	53	+ 11
1.0	Plastic Surgery	43	18	+ 25
1.5	Thoracic Surgery	38	27	+ 11
4.0	Urology	83	71	+ 12

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* Adjusted upward for seasonal residents and/or short-term visitors.

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